

PATENT CLAIMS

1. A pluggable electrical apparatus, in particular a surge arrester (A), with an axially symmetrically formed housing (1) with a housing axis (7) running in the plugging direction,
5 a means for fastening the apparatus housing (1) on a housing (30) of a high-voltage installation (H), and with
10 an axially symmetrical active part (6) with an axially routed circuit, including a plug-in contact (8), a grounding terminal (9) and a non-linear resistance element (10) connected in between, and with
15 an axially symmetrical insulator (13), which forms an insulating cone (14) and surrounds the non-linear resistance element (10) and an electrical connection (11) with respect to the plug-in contact (8),
20 characterized
in that the fastening means is formed into the apparatus housing (1), and
in that the active part (6) is mounted displaceably in the axial direction in the apparatus housing (1)
25 and held with a prestressing force with respect to the apparatus housing (1) before a plug-in connection is formed.
2. The apparatus as claimed in claim 1, characterized
30 in that the insulator (13) is provided with an electrically conductive layer (16).
3. The apparatus as claimed in claim 2, characterized
35 in that an end of the insulating cone (14) remote from the plug-in contact (8) is configured as an undercut (15) and bears an inwardly disposed, rounded portion of the electrically conductive layer (16).

4. The apparatus as claimed in one of claims 1 to 3,
characterized in that the non-linear resistance
element (10) is given a rounded form on the plug-in
contact side.
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5. The apparatus as claimed in claim 4, characterized
in that the insulator (13) is given a rounded
configuration, at least on the plug-in contact
side.
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6. The apparatus as claimed in one of claims 1 to 5,
characterized in that an opening (37) is formed
into a lateral surface of the apparatus housing
(1).
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7. The apparatus as claimed in claim 6, characterized
in that the opening (37) is positioned opposite a
region of the insulator (13) which comprises the
end of the non-linear resistance element (10) on
the plug-in contact side.
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8. The apparatus as claimed in either of claims 6 and
7, characterized in that, when the apparatus
housing (1) is formed as a cylinder, at least two
openings arranged offset with respect to each other
in the circumferential direction of the cylinder
are provided.
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9. The apparatus as claimed in one of claims 1 to 8,
in which the grounding terminal (9) is fastened to
a groundable end of the active part (6) and led
through a base (3) of the apparatus housing (1),
characterized in that a prestressed compression
spring (18) is arranged between the groundable end
of the active part (6) and the base (3) of the
apparatus housing (3).
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10. The apparatus as claimed in claim 9, in which a thread (20) is formed into an end of the grounding terminal (9) led out from the apparatus housing (1), characterized in that the thread (20) serves for receiving a clamping nut (21), and in that the grounding terminal (9) has a thread-free portion (22) which is led out from the apparatus housing (1) and serves for the mounting of a securing sleeve (23) which can be provided between the clamping nut (21) and the base (3) of the apparatus housing (1).
11. The apparatus as claimed in either of claims 9 and 10, characterized in that a bearing sleeve (19) which is axially aligned and encloses the grounding terminal (9) is formed into the base (3) of the apparatus housing (1), with a lateral surface serving for guiding the compression spring (18).
12. A high-voltage installation (H) with the electrical apparatus (A) as claimed in one of claims 1 to 11, with a fastening means for the electrical apparatus (A) provided on a housing (31) of the installation (H) and with a mating plug-in contact (32) and a mating insulating cone (33), in which installation (H), after plugging together, the fastening means of the installation housing (31) and the fastening means of the electrical apparatus (1) are rigidly connected and the insulating cone (14) and the mating insulating cone (33) are pressed against each other without a gap.
13. The installation as claimed in claim 12, characterized in that an adapter flange (34) is arranged between a fastening means of the electrical apparatus (A), configured as a flange (5), and a mating flange of the installation housing (30).

14. The installation as claimed in either of claims 12 and 13, characterized in that the apparatus housing (1) and the installation housing (30) are given an electrically conductive form, and in that the apparatus housing (1) is grounded via the fastening means and the installation housing (31).
15. A method for producing the high-voltage installation (H) as claimed in one of claims 12 to 14, characterized in that the fastening means of the electrical apparatus (A) is fixed on the fastening means of the high-voltage installation (H), and in that, after that, the active part (6) of the electrical apparatus (A) is led into the installation housing (30), with the prestressing force being reduced, with an electrical plug-in connection of the plug-in contact (8) and mating plug-in contact (32) being formed and with gap-free pressing of the insulating cone (14) and mating insulating cone (33) being formed.
16. The method as claimed in claim 15, characterized in that, during or after the reduction of the prestressing force, the position of a marking (36) of the active part (6) is checked in an opening (37) of the apparatus housing (1).
17. The method as claimed in either of claims 15 and 16, characterized in that the prestressing force is changed by turning a clamping nut (21) supported on a securing sleeve (23), and in that the securing sleeve (33) is removed after the plug-in connection has been formed and the cones (14, 33) pressed.